

Date: Thursday, 6/15/2006 7:45:02 AM
 User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: WEARPLATE		
Job Number	: 24199		Part Number	: D25775		
Estimate Number	: 10299		Drawing Number	: D2577 REV E		
P.O. Number	: N/A		Project Number	: N/A		
This Issue	: 6/15/2006	S.O. No. : N/A	Drawing Revision	: E		
Prsht Rev.	: NC		Material	: N/A		
First Issue	: 6/13/2006	Type : PURCHASED PARTS	Due Date	: 12/5/2005		
Previous Run	: 24878		Qty:	50	Um:	Each
Written By	: See Youman Below					
Checked & Approved By	:					
Comment	: Est: F 02.09.24 Re-format KJ/RF					

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M1010S16GA	1010/1025/A21/6aA SHEET Batch: M100473
2.0	WATER JET	FLOW WATER JET
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
4.0	QC6	DIMENSIONAL CHECK
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
6.0	BRAKE NC	NC BRAKE

Comments:

- 1.0: 0.9810 sf(s)/Unit Total : 49.0500 sf(s)
1010/1025/A21/6aA SHEET
- 2.0: FLOW WATER JET
- 3.0: INSPECT PARTS AS THEY COME OFF MACHINE
- 4.0: DIMENSIONAL CHECK
Inspect dimensions per template D2577-5T1
- 5.0: SMALL & MEDIUM FAB RESOURCE 1
- 6.0: NC BRAKE
1-Form on brake using DT8155 and DT8179 as per Dwg D2577
2-Form joggle using DT8157 as per Dwg D2577
3-Identify as D2577-5

Handwritten Notes:

- 1.0: M 06 06 15
- 2.0: M 06 06 19 850
- 3.0: M 06 19 15 50
- 4.0: M 06 19 15 50
- 5.0: M 06 06 20 50
- 6.0: M 06 06 20 50

Date: Thursday, 6/15/2006 7:45:02 AM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 24199

Part Number: D25775

Job Number:



Seq. #: Machine Or Operation:

Description :

7.0 QC5 INSPECT WORK TO CURRENT STEP



Job 06-21

Comment: INSPECT WORK TO CURRENT STEP

8.0 POWDER COATING POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

DC 06/06/21 (50)

9.0 QC3 INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FC 06/06/22 (49)

10.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: FP 19

FC 06/06/22 (49)

11.0 DC DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

DC 06/06/22 (49)

Job Completion



W 06/06/22

Date: Tuesday, 6/13/2006 3:08:06 PM
 User: Linda Lacelle

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services			Drawing Name	: WEARPLATE		
Job Number	: 24199			Part Number	: D25775		
Estimate Number	: 10299			Drawing Number	: D2577 REV E		
P.O. Number	:			Project Number	: N/A		
This Issue	: 6/13/2006	S.O. No. :		Drawing Revision	: E		
Prsht Rev.	: NC			Material	:		
First Issue	: / /			Due Date	: 12/5/2005		
Previous Run	: 24878			Qty:	50	Um:	Each
Written By	:						
Checked & Approved By	:						
Comment	: Est: F 02.09.24 Re-format KJ/RF						

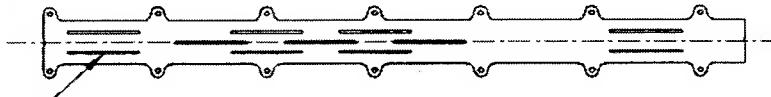
Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	PG	PURCHASING <i>1010/1025 166A (M1010S166A)</i> <i>Batch: M100473</i> <i>Issue P/O: _____</i> <i>Email or Ship DXF file to vendor _____</i> <i>Laser Cut per Dwg D2577 flat pattern D2577-5</i> <i>Material release note required</i> <i>M1 06 06 15</i>
2.0	D25775F	Wearplate, Centre <i>Wearplate E</i> <i>Dry Run E</i> <i>Rev. E</i> <i>Comment: Qty: 1.0000 U(s)/Unit Total: 50.0000 U(s)</i> <i>M1 06 06 15 (50)</i>
3.0	PACKAGING 1 QC2	PACKAGING RESOURCE #1 <i>Inspect AS per Template</i> <i>DT2577-ST1.</i> <i>Comment: PACKAGING RESOURCE #1</i> <i>Receive & Inspect For Transit Damage</i> <i>Ensure material release note is attached</i> <i>M1 06 06 15 (50)</i>
4.0	QC8	DIMENSIONAL CHECK <i>QC8</i> <i>Comment: DIMENSIONAL CHECK</i> <i>Inspect dimensions per template D2577-5T1</i>
5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1 <i>Comment: SMALL & MEDIUM FAB RESOURCE 1</i> <i>Deburr</i>

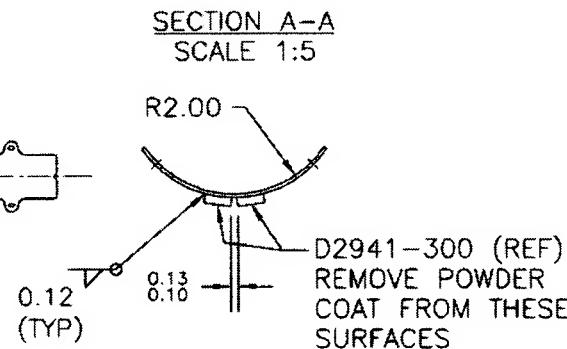
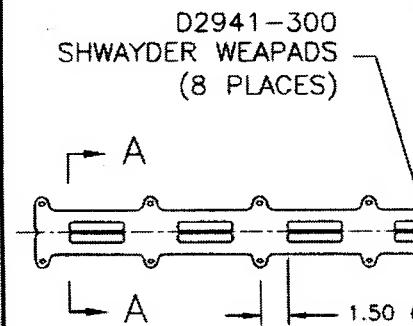
7560 HARDCOAT WELD
4.0 LONG
0.063 TO 0.125 HIGH
(TYP. 11 PLS.)
WELD AFTER BENDING AS
ILLUSTRATED PER DT8308



D2577-1 & D2577-3 WEARSHOE

MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2577-21 & D2577-23 WEARSHOE

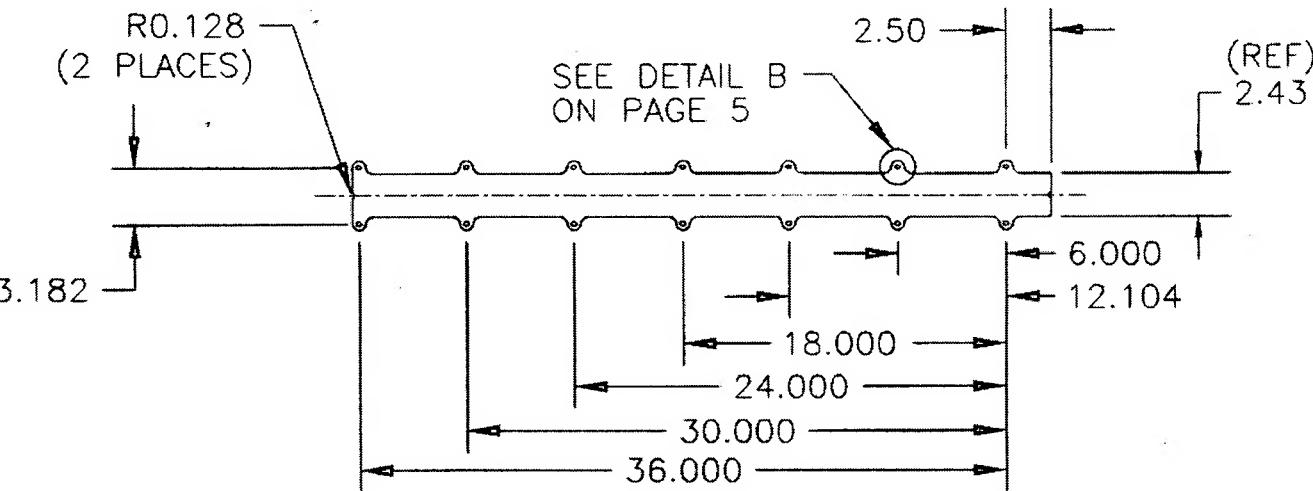
MAKE FROM D2577-11 AND D2577-13 RESPECTIVELY

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DART

*GA CON
DART*

DESIGN	DRAWN BY	DART AEROSPACE LTD	
CHECKED	APPROVED	DRAWING NO.	REV. E
		D2577	SHEET 1 OF 5
DATE		TITLE	SCALE
00.09.22		WEARSHOE	1:10
A	96.09.16	NEW ISSUE	
B	96.12.04	ADD HARDCOAT WELDS	
C	97.05.30	CHANGE HOLES TO OBOUNDS	
D	98.08.17	CORRECTED DIMENSIONS ON -1 & -3	
E	00.09.22	ADD D2577-101/-11/-13 INCORPORATE DE09176	

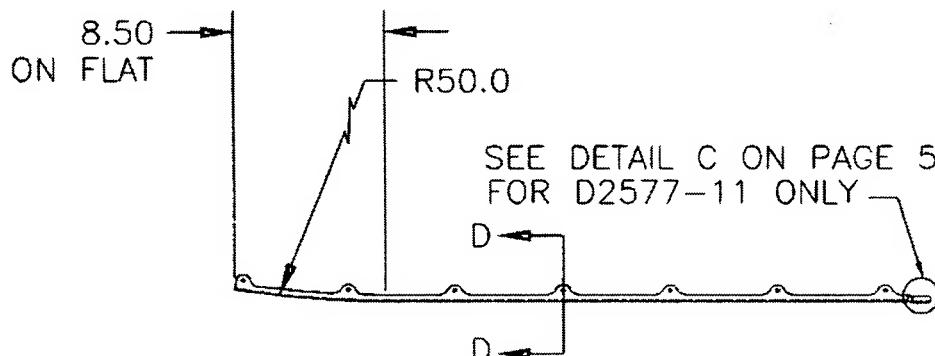


D2577-101 FLAT PATTERN

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570
SERIES STEEL 0.063 THICK

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



D2577-11 & D2577-13 LONGITUDINAL BEND

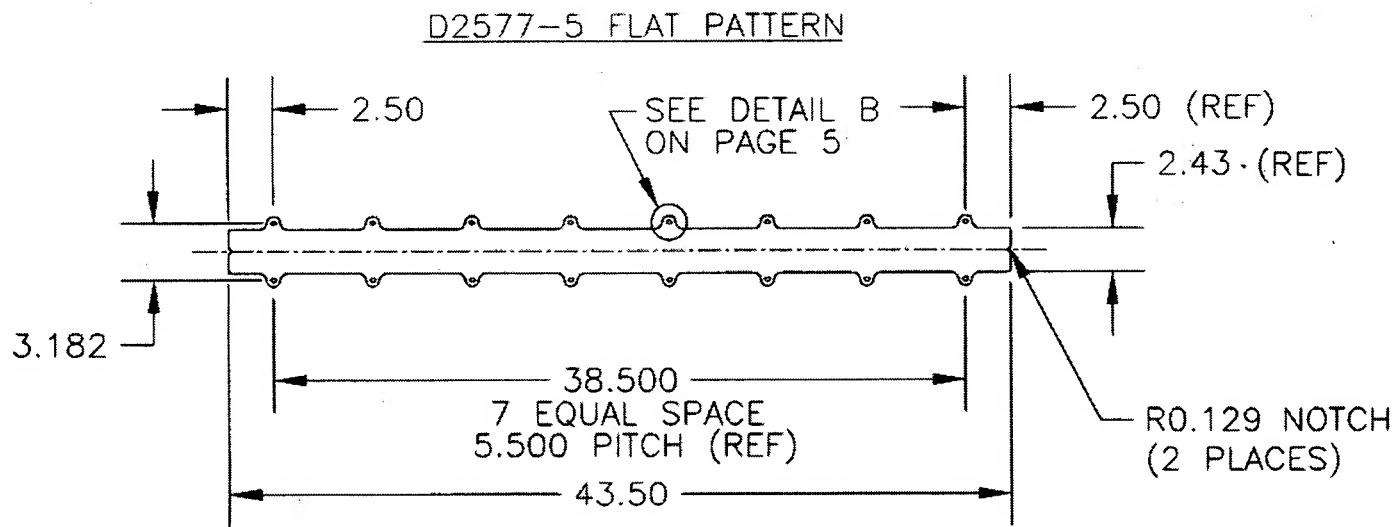
MAKE FROM D2577-101

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

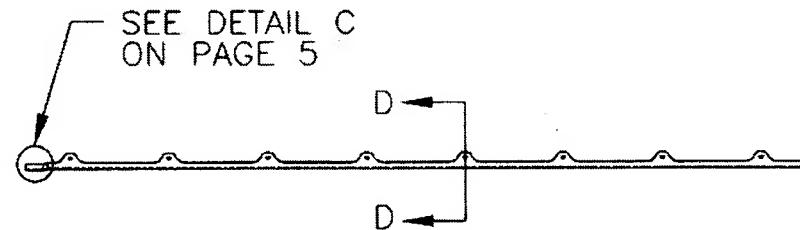
DESIGN	DRAWN BY	DART AEROSPACE LTD	
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA	
DATE		REV. E	
00.09.22		SHEET 2 OF 5	
TITLE		SCALE	
WEARSHOE		1:10	

DA COPY IS
REF

RELEASED
00 09.26
ff



D2577-5 LONGITUDINAL BEND



D2577-5 WEARSHOE

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570
SERIES STEEL 0.063 THICK

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

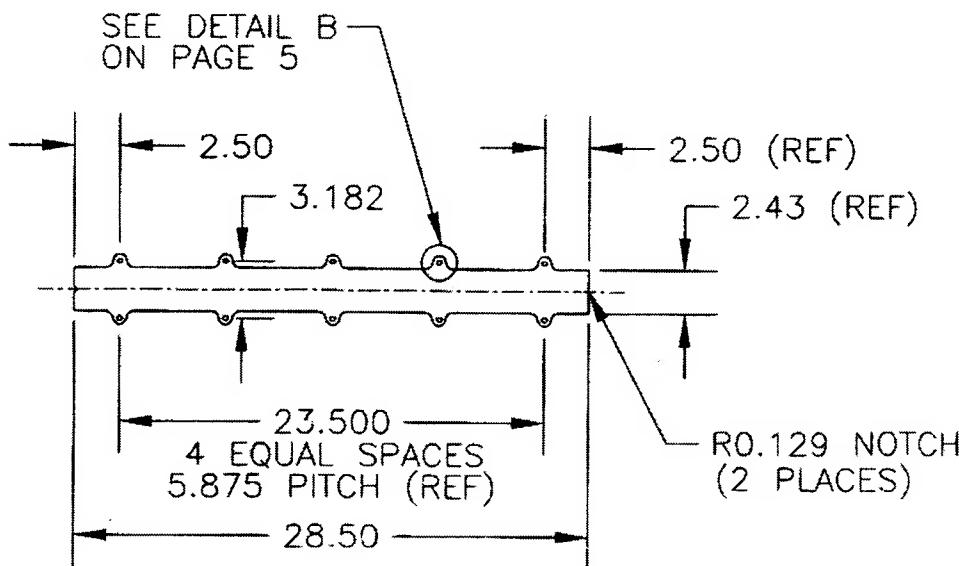
DART

COPY 105
03/03

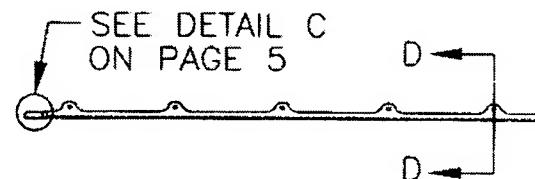
DESIGN	DRAWN BY	DART AEROSPACE LTD
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA
		DRAWING NO.
		D2577
DATE		SCALE
00.09.22		1:10
		TITLE
		WEARSHOE

RELEASED
06.04.2004

D2577-7 FLAT PATTERN



D2577-7 LONGITUDINAL BEND



D2577-7 WEARSHOE

BREAK ALL SHARP CORNERS 0.010 TO 0.020

MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570
SERIES STEEL 0.063 THICK

FINISH: POWDER COAT GREY (4.3.5.6) PER DART QSI 005 4.3
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DART

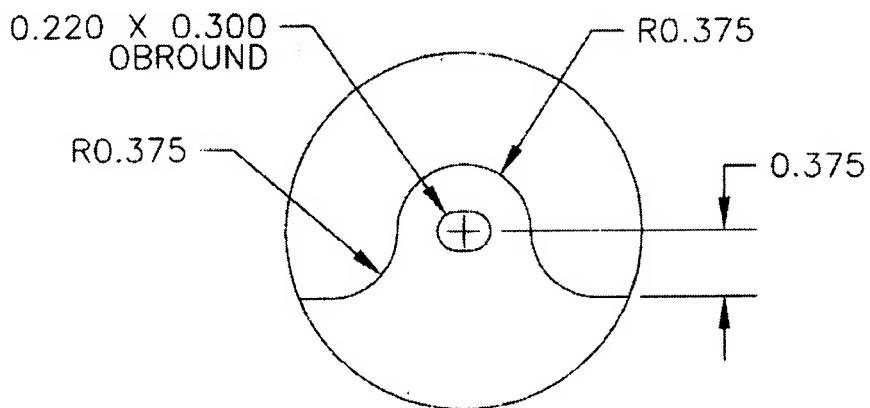
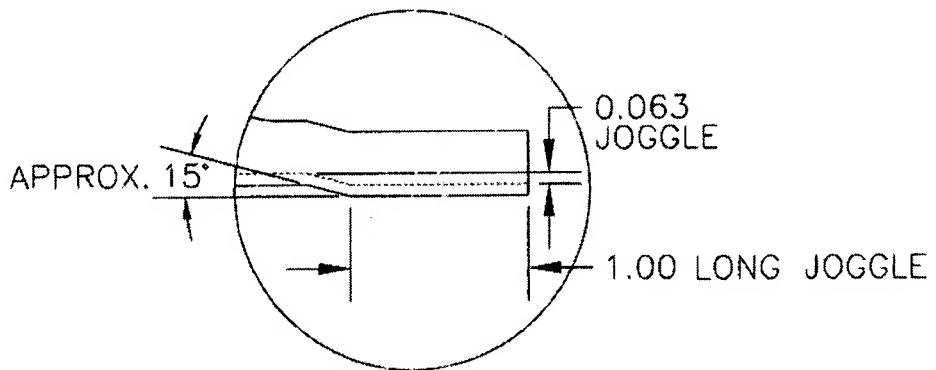
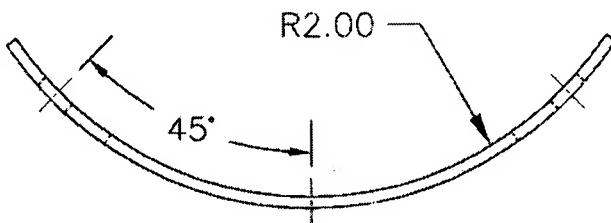
COPIES
02

DESIGN	DRAWN BY	DART AEROSPACE LTD	
CHECKED	APPROVED	HAWKESBURY, ONTARIO, CANADA	
		DRAWING NO.	REV. E
		D2577	SHEET 4 OF 5
DATE	TITLE		SCALE
00.09.22	WEARSHOE		1:10

RELEASED
09-26-96

DARTCOPY ISSUE
DRAFT

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO.	REV. E
		D2577	SHEET 5 OF 5
DATE	TITLE	WEARSHOE	SCALE 1:10
00.09.22			

DETAIL B (SCALE 1:1)RELEASED
00.09.26DETAIL C (SCALE 1:1)SECTION D-D (SCALE 1:1)

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DART AEROSPACE LTD	Work Order:	24199
Description:	Part Number:	2577-5
Inspection Dwg:	Rev:	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article X Prototype

Measured by:	<u>M. M</u>	Audited by:	<u>AB</u>	Prototype Approval:	<u>NIA</u>
Date:	<u>06/06/15</u>	Date:	<u>06/06/15</u>	Date:	<u>NIA</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

5/38

DART AEROSPACE LTD	Work Order:	24199
Description: Wearplate	Part Number:	D2577-5
Dwg: D2577 Rev. E	Qty:	50 Page 1 of 1

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveller Dwg not required	OF	05.09.02	50
2	PG	Issue P/O: 2008589 Email or Ship DXF file to vendor Laser Cut per Dwg D2577 flat pattern D2577-5 Material release note required	LG	05/09-06	50
3	RG	Receive and Inspect for transit damage Ensure that material release note is attached	CD	05/09/08	50
4	QC6	Inspect dimensions per template D2577-5T1	J	05.10.06	50
5	GB	Deburr if necessary		N/A	
6	GB	Form on brake using DT8155 and DT8179 as per Dwg D2577	SB	05/11/08	50
7	GB	Form joggle using DT8157 as per Dwg D2577 Identify as D2577-5	SB	05/11/08	50
8	QC5	Inspect work to Step 7	J	05.11.08	50
9	FP	Powder Coat Grey (Ref.4.3.5.6) per QSI 005 4.3	PC	05/11/09	50
10	QC3	Inspect Powder Coat	MM	05/11/09	50
11	FP	Identify and Stock	MM	05/11/09	50
12	AC	Cost / part 14.88	SAC	05.11.10	50
13	DC	Close W/O 15.23 Inspect Level 21	GP	05/11/10	50

Rev	Date	Change	Revised By	Approved
A	96.08.20	New Issue		
B	98.04.15	Changed finish detail, changed forming sub-contractor	KB	
C	99.02.02	Added inspection levels, Jig numbers	DM	
D	99.03.25	Added Joggle	DM	
E	00.10.02	Rev.E dwg	EC	
F	02.09.24	Re-format	KJ RF	RF

RELEASED
02/10/02 RF

Job Costing Report

Dart Aerospace Ltd.
HawkesburySep 02, 2005
09:01 am

Work Order No : 0024199
 Project Name : D2577-5
 Project For : WK538
 Work Order Type : Main
 Main WO Number :
 House Part Number : D2577-5
 Description : Wearplate, Centre
 Manufactured : Yes
 Amount Req'd : 50
 Amount Done : 0
 Start Date : 09-01-05
 Est Finish Date : 09-22-05
 Act Finish Date :
 Drawings Reqd : No
 Ok for Approval :
 Approval Rec'd : \$0 Posted to Finished Goods

Department Code:
 Burden Flags : NNNNNNN
 WO Status : Open
 Invoice State : Not Invoiced
 Invoice Date :
 Invoice Number :
 Invoice Amount : 0.00

Order Entry No :
 OE Value : 0.00

Est Mark Up : 0.000%
 Actual Mark Up : 0.000%

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	0.00	0.00		
Production Cost	0.00	0.00	0.00	0.00	0.00
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
=====		=====	=====		
Burden	0.00	0.00	0.00		
=====		=====	=====		
Total Cost	0.00	0.00	0.00		
Mark up	0.000	0.000			
Selling Cost	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	0.00	0.00
Profits/ (Loss)	0.00	0.00



CUSTOMER Wilkinson
CUSTOMER O/N 90-21N-540

P50128D1003

New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8999 / 375 8111 Auckland
(09) 235 8069 / 235 3535 Waituku
Fax: (09) 375 8959

TEST CERTIFICATE

Ref: 5078/21788

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT										MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)														
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE()	BEND	YIELD	T.S.	%ELONG	HARDNESS	R	LENGTH		
		x100										x1000										180°	x100	G.L.=	HRB	()
R9-457097-00	640590	4	TR	20	13	17	12	17	29	1	8	1	1									46			1562	
R9-457098-00	640590	4	TR	20	13	17	12	17	20	1	8	1	1									46			1483	
R9-457099-00	640590	4	TR	20	13	17	12	17	20	1	8	1	1									46			1562	
R9-457100-00	640590	4	TR	20	13	17	12	17	20	1	8	1	1									46			1496	
R9-457101-00	640590	4	TR	20	13	17	12	17	20	1	8	1	1									47			1562	
R9-457102-00	640590	4	TR	20	13	17	12	17	20	1	8	1	1									47			1555	

YIELD (A)=0.2% PROOF STRESS (B)=LOWER YIELD STRESS	GAUGE LENGTH (G.L.) (A)=200mm (B)=50mm	(C)=80mm (D)=5.65 So	(E)=2° (F)=8°	PLASTIC STRAIN RATIO (r) (A)=r0 (B)=r90	(C)=r45 (D)=(r0+r90+2r45) / 4	IMPACT TEST (A)=10mm x 10mm (B)=7.5mm x 10mm	(C)=5mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	CARBON EQUIVALENT VALUE (CE) (A)=C+Mn/6 (B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15	(C)=C+Mn/6+Si/24 (D)=
--	--	-------------------------	------------------	---	----------------------------------	--	---	---	--------------------------

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*
QC METALLURGIST

16 ga crms



Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 08, 2005
11:10 am

Work Order No : 0024199
 Project Name : D2577-5
 Project For : WK538
 Work Order Type : Main
 Main WO Number :
 House Part Number : D2577-5
 Description : Wearplate, Centre
 Manufactured : Yes
 Amount Req'd : 50
 Amount Done : 0
 Start Date : 09-01-05
 Est Finish Date : 09-22-05
 Act Finish Date :
 Drawings Reqd : No
 Ok for Approval :
 Approval Rec'd : \$0 Posted to Finished Goods

Department Code:
 Burden Flags : NNNNNNN
 WO Status : Open
 Invoice State : Not Invoiced
 Invoice Date :
 Invoice Number :
 Invoice Amount : 0.00

Order Entry No :
 OE Value : 0.00

Est Margin : 0.000%
 Actual Margin : 0.000%

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	676.50	100.00	0.00	676.50
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	676.50	100.00		
Margin :	0.000	0.000			
Selling Cost :	0.00	676.50			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/ (Loss) :	0.00	(-676.50)